

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): High purity hafnium having a purity of 4N or higher excluding zirconium and gas components, an oxygen content of 40wtppm or less, a sulfur content of 10wtppm or less, a phosphorus content of 10wtppm or less, and a zirconium content of 0.1wt% or less.

Claim 2 (previously presented): A sputtering target consisting of high purity hafnium having a purity of 4N or higher excluding zirconium and gas components, an oxygen content of 40wtppm or less, a sulfur content of 10wtppm or less, a phosphorus content of 10wtppm or less, and a zirconium content of 0.1wt% or less.

Claims 3-8 (canceled).

Claim 9 (currently amended): A sputtering target according to claim [8] 2, wherein said oxygen content is 10wtppm or less.

Claim 10 (previously presented): A sputtering target according to claim 9, wherein said sputtering target has a body produced by subjecting a hafnium raw material to electron beam melting to form a hafnium ingot, subjecting the ingot to deoxidation with molten salt, and forming a sputtering target from the ingot after said deoxidation.

Claim 11 (previously presented): A thin film deposited on a substrate, said thin film consisting of high purity hafnium having a purity of 4N or higher excluding zirconium and gas components, an oxygen content of 40wtppm or less, a sulfur content of 10wtppm or less, a phosphorus content of 10wtppm or less, and a zirconium content of 0.1wt% or less.

Claims 12-13 (canceled).

Claim 14 (currently amended): A thin film according to claim [13] 11, wherein said oxygen content is 10wtppm or less.

Claim 15 (previously presented): A thin film according to claim 14, wherein said thin film is a sputtered thin film produced by subjecting a hafnium raw material to electron beam melting to form a hafnium ingot, subjecting the ingot to deoxidation with molten salt, forming a sputtering target from the ingot after said deoxidation, and depositing said thin film on the substrate by performing sputtering with the sputtering target.

Claims 16-17 (canceled).

Claim 18 (currently amended): High purity hafnium according to claim [17] 1, wherein said oxygen content is 10wtppm or less.

Claim 19 (previously presented): High purity hafnium according to claim 18, wherein said high purity hafnium is produced by subjecting a hafnium raw material to electron beam melting to form a hafnium ingot and subjecting the ingot to deoxidation with molten salt.